



STATE OF WASHINGTON  
DEPARTMENT OF AGRICULTURE  
Avian Health Program

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## **VIRULENT NEWCASTLE DISEASE (vND): FREQUENTLY ASKED QUESTIONS**

### **What is virulent Newcastle disease (vND)?**

Virulent Newcastle disease (vND) is a highly contagious and fatal viral disease affecting all species of birds. The disease is so virulent many birds die without showing clinical signs. A death rate of almost 100% can occur in unvaccinated poultry flocks and vND can even infect and cause death in vaccinated poultry. The virus spreads through droppings of infected birds and secretions from their nose, mouth, and eyes.

### **What are the signs of vND?**

#### **General**

- Inactivity
- Partial to total egg production drop
- Production of thin-shelled eggs
- Swelling of tissues around eyes and in neck
- Sudden death
- Increase in flock death losses

#### **Respiratory system**

- Sneezing
- Gasping for air/respiratory distress
- Nasal discharge
- Coughing

#### **Nervous system**

- Depression
- Drooping wings
- Muscular tremors
- Twisting of head and neck
- Circling
- Complete paralysis

#### **Digestive System**

- Greenish, watery diarrhea

### **How can I protect my birds from vND?**

#### **1. Keep your distance.**

- a. Restrict access to your poultry and your birds.
- b. Only let caretakers have access to your birds. Your caretakers should not attend bird shows or other events where birds are present.
- c. If you must have visitors, give them clean and disinfected footwear, booties, or insist they clean and disinfect their footwear before and after their visit.
- d. Game birds and migratory waterfowl should not have contact with poultry flocks.

#### **2. Keep it clean.**

- a. Keep a pair of shoes and a set of clothes to wear only around your birds.

- b. Remove mud, manure, etc. from footwear. Clean with soap and water, rinse well, then apply an effective disinfectant for the required contact time.
- c. Wash hands thoroughly with soap and water before and after handling each group of birds.
- d. Control flies, rodents, wildlife, and pets; reduce or eliminate their contact with your birds.

### **3. Don't haul disease home.**

- a. If you travel to places where other birds or bird owners have been—even feed stores—clean and disinfect vehicle tires and other items that travelled with you.
- b. Quarantine new or show birds for at least 30 days. Designate separate clothing, footwear, equipment, and tools for quarantined birds. Care for the quarantined birds last and monitor their health closely.

### **4. Don't borrow disease from your neighbor.**

- a. Don't share birds, equipment, tools, or poultry supplies with your neighbors or other bird owners.
- b. If you must borrow equipment, disinfect it before and after use.

### **5. Know the warning signs of infectious bird disease.**

- a. Monitor your birds daily for signs of illness.
- b. Vaccinate against diseases of concern when possible or recommended.

### **6. Report sick birds.**

- a. If your birds have signs of vND or any other illness, contact your private veterinarian or the Avian Health and Food Safety Laboratory (AHFSL) at 253-445-4544 for guidance regarding available diagnostics.
- b. If you observe a sudden increase in sick or dead birds in your flock, contact the state veterinarian's office at 360-902-1878 or call the Washington State Department of Agriculture's Avian Health Program at 800-606-3056.

### **Is there a vND vaccine?**

The vND vaccine is given to birds as eye drops at least two times per year. Recommended uses are for poultry flocks with waterfowl contact, those in the face of an outbreak, or flocks in endemic areas where the disease has become common. Vaccinated birds can still get vND, but they usually have milder cases than unvaccinated birds.

### **Have there been any vND outbreaks recently?**

A prolonged vND outbreak raged in California from May 17, 2018 to May 31, 2020. Initial cases were believed associated with movement of birds involved in illegal cock fights. The USDA confirmed 476 vND positive locations in California; this included 4 commercial premises and 472 backyard operations. Six counties were affected in southern California including Riverside, San Bernardino, Los Angeles, Ventura, Alameda, and San Diego counties. Despite quarantines, birds were moved illegally from these areas and spread the disease to Utah County, Utah and Coconino County, Arizona.

The outbreak was brought under control by movement restriction, enhanced biosecurity measures, and depopulation. During the two year outbreak, ~8,700 premises were quarantined, ~226,000 locations with birds were visited by animal health officials, and more

than 1.2 million birds were depopulated from ~2,400 premises. The USDA paid \$6.7M in indemnity payments to producers needing to have their birds destroyed. Millions in additional expenses were caused by transportation, labor, and support of more than 300 state and federal animal health responders; laboratory tests; depopulation expenses; and decontamination efforts. This extensive and challenging outbreak highlights the importance of preventing vND and controlling outbreaks through effective quarantines.

May 18, 2021